



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,242	01/30/2006	Jan Petrus Human	P08831US00/DEJ	3423
<div>881 7590 02/05/2008 STITES &amp; HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314</div> <div>EXAMINER MCDOWELL, SUZANNE E</div> <div>ART UNIT 1791 PAPER NUMBER</div> <div>MAIL DATE 02/05/2008 DELIVERY MODE PAPER</div>				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,242	<b>Applicant(s)</b> HUMAN, JAN PETRUS	
	<b>Examiner</b> Suzanne E. McDowell	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/27/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of group 1a, claims 1-10 in the reply filed on November 9, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 11-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 9, 2007.

### ***Claim Objections***

3. Claims 3 and 4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 claims displacing the plunger to reduce the volume of the well, while claims 3 and 4 claim displacing mold components to reduce the volume of the well. Additionally, claim 4 contains the limitation "whilst maintaining said plunger in a fixed position" which is directly opposite the "displacing the plunger" language of claim 1.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (US Patent 4,649,013). Yamamoto et al. discloses the apparatus claimed as follows: providing upper and lower mold components (8, 7) and providing upper and lower plungers (5, 6), which together form a mold cavity (7a and 10) with a well (7a). Yamamoto et al. inherently discloses means for displacing the various mold component by teaching different embodiments where the mold components are moving with respect to each other. See, for example, embodiments such as displacing both plungers (5, 6) into the mold cavity (column 7, lines 6-10); fixing the lower plunger (6) while lowering the upper plunger (5) and raising the lower mold component (7); fixing the upper plunger (5) and raising the lower plunger (6) and the lower mold component (7) (column 8, lines 2-15).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US Patent 4,649,013). Yamamoto et al. teaches the basic method and apparatus

claimed as follows: providing upper and lower mold components (8, 7) and providing upper and lower plungers (5, 6), which together form a mold cavity (7a and 10) with a well (7a); raising the upper mold component (8) and upper plunger (5); feeding molten plastic (12) onto the upper end surface of the lower plunger (6); i.e., into the well (see Fig. 2); lowering the upper mold component (8) and, while maintaining the lower plunger (6), lowering the upper plunger (5) to compress the plastic stock (12) and displace it into the cavity (10) and form a cap (column 5, lines 17-21). Yamamoto et al. further teaches embodiments such as displacing both plungers (5, 6) into the mold cavity (column 7, lines 6-10); fixing the lower plunger (6) while lowering the upper plunger (5) and raising the lower mold component (7); fixing the upper plunger (5) and raising the lower plunger (6) and the lower mold component (7) (column 8, lines 2-15).

Regarding claims 1 and 2, Yamamoto et al. does not specifically teach displacing the lower plunger to reduce the volume of the well. Because the claims language is "comprising", however, it does not preclude the method of raising the lower plunger (6) and the lower mold component (7). Additionally, in view of the teachings of Yamamoto et al. and the various embodiments therein, it would have been obvious to a person of ordinary skill in the art to use routine experimentation to determine the optimal method for displacing the various mold components and plungers to obtain the desired finished product.

Regarding claims 3, 4, 7, and 10, Yamamoto et al. does not specifically teach an embodiment where both mold component are displaced downwardly with respect to the plunger. Because the claims language is "comprising", however, it does not preclude the method of lowering both of the upper and lower mold components (8, 7). Additionally, in view of the teachings of Yamamoto et al.

and the various embodiments therein, it would have been obvious to a person of ordinary skill in the art to use routine experimentation to determine the optimal method for displacing the various mold components and plungers to obtain the desired finished product.

Regarding claim 5, Yamamoto et al. further teaches embodiments such as displacing both plungers (5, 6) into the mold cavity (column 7, lines 6-10), which encompasses displacing the lower plunger upwardly after lowering the upper mold component (8) (column 5, lines 17-21). Because the claims language is "comprising", it does not preclude the method of displacing the lower plunger (6) upwardly after lowering the upper mold component (8). Additionally, in view of the teachings of Yamamoto et al. and the various embodiments therein, it would have been obvious to a person of ordinary skill in the art to use routine experimentation to determine the optimal method for displacing the various mold components and plungers to obtain the desired finished product.

Regarding claims 6 and 9, Yamamoto et al. further teaches embodiments such as displacing both plungers (5, 6) into the mold cavity (column 7, lines 6-10), which encompasses displacing the lower plunger upwardly after raising the lower plunger (6) and the lower mold component (7) (column 8, lines 2-15). Because the claims language is "comprising", it does not preclude the method of displacing the lower plunger upwardly after raising the lower plunger (6) and the lower mold component (7). Additionally, in view of the teachings of Yamamoto et al. and the various embodiments therein, it would have been obvious to a person of ordinary skill in the art to use routine experimentation to determine the optimal method for displacing the various mold components and plungers to obtain the desired finished product.

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawaguchi et al. (US Patent 4,913,871); and Shiao et al. (US Patent 5,415,817).
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne E. McDowell whose telephone number is (571) 272-1205. The examiner can normally be reached on Mon and Th 5:30am-2pm, Tues 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Suzanne E. McDowell/  
Primary Examiner, Art Unit 1791